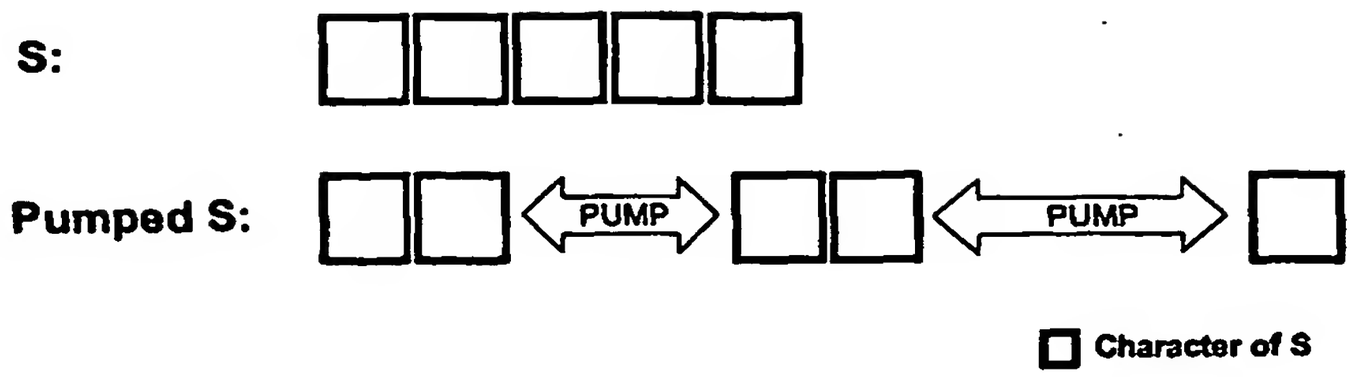

S:
Pumped S:
PUMP
PUMP
Character of S

Fig. 1A

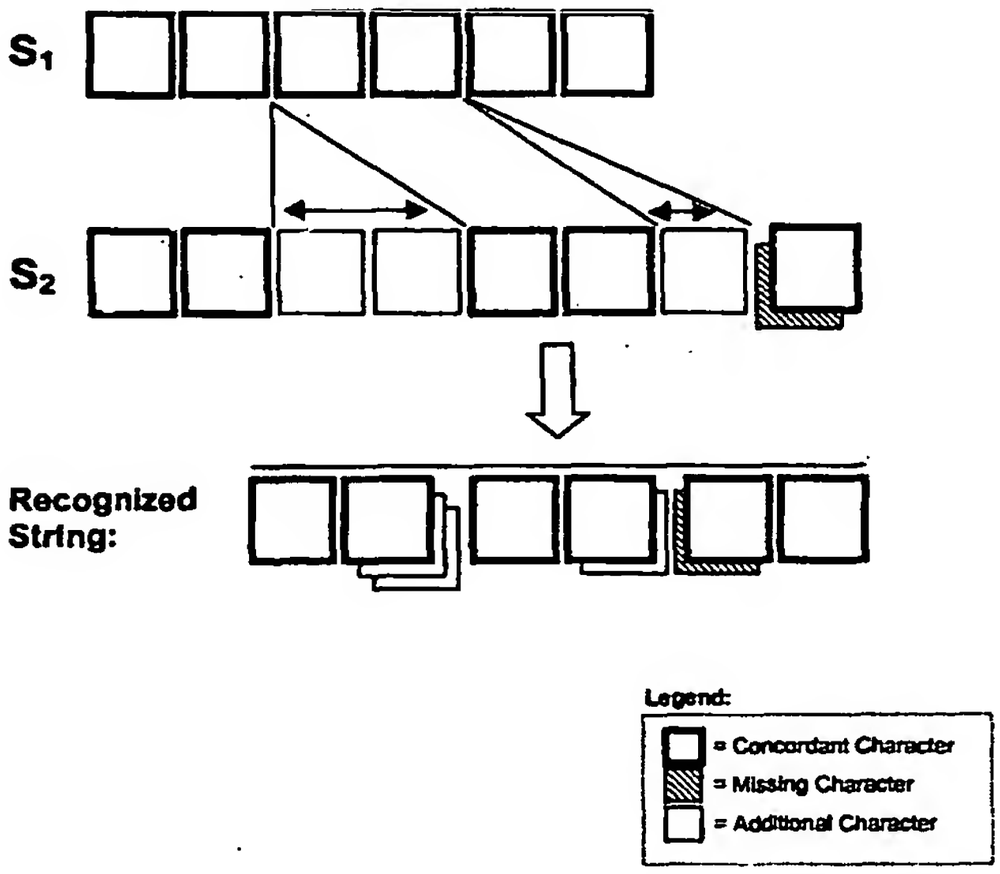

Similar structure of two copmpared strings S1 and S2:
S1
S2
Recognized String:
Legend:
= Concordant Character
= Missing Character
= Additional Character

Fig. 1B

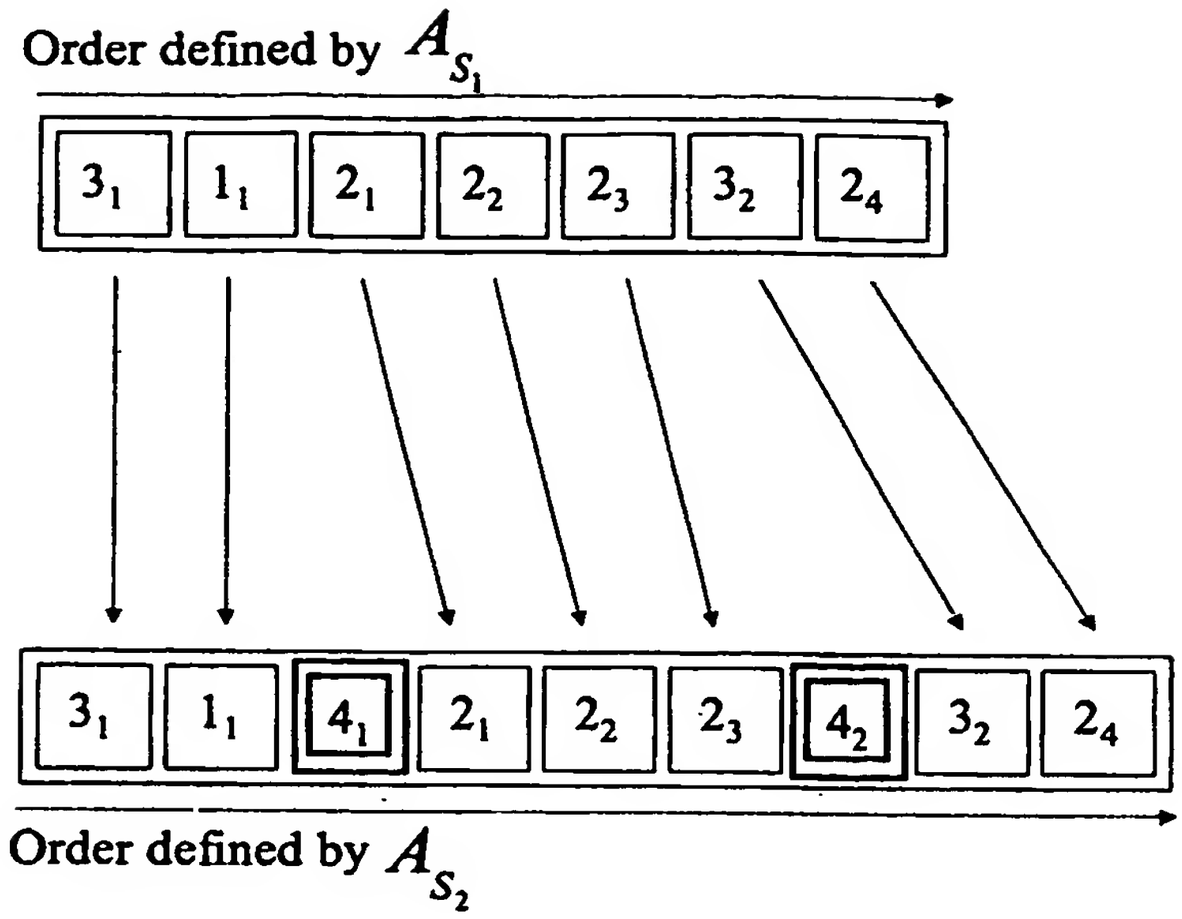
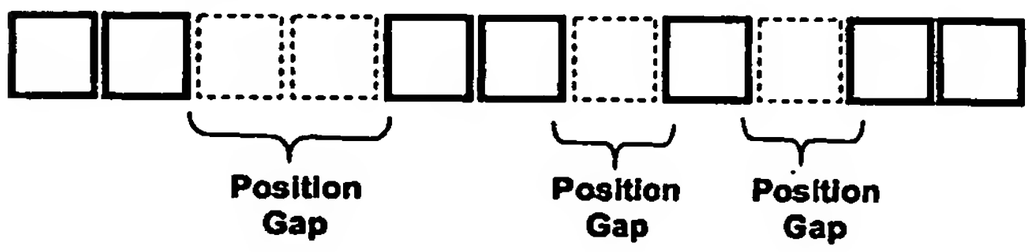


Fig. 1C



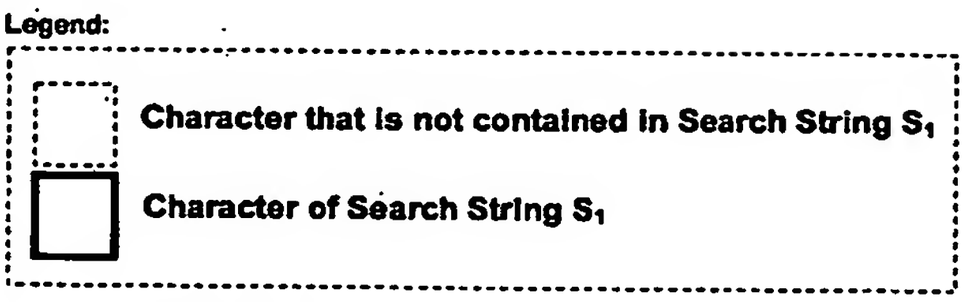


Fig. 1D

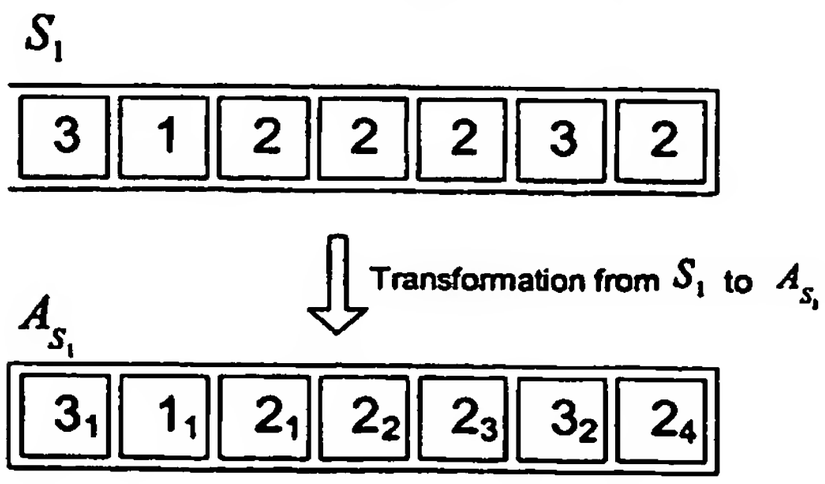


Fig. 2

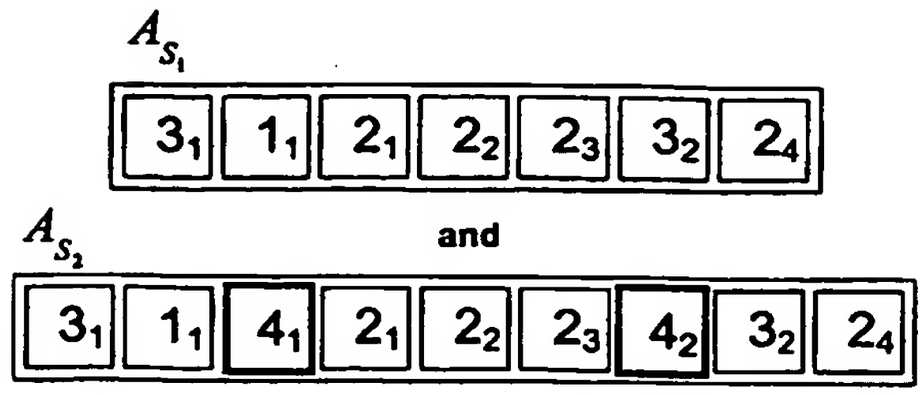
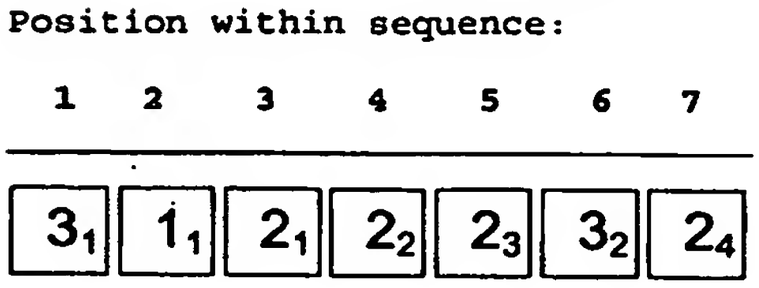


Fig. 3



⇨ **Positions define an order of elements within sequence!**

Fig. 4

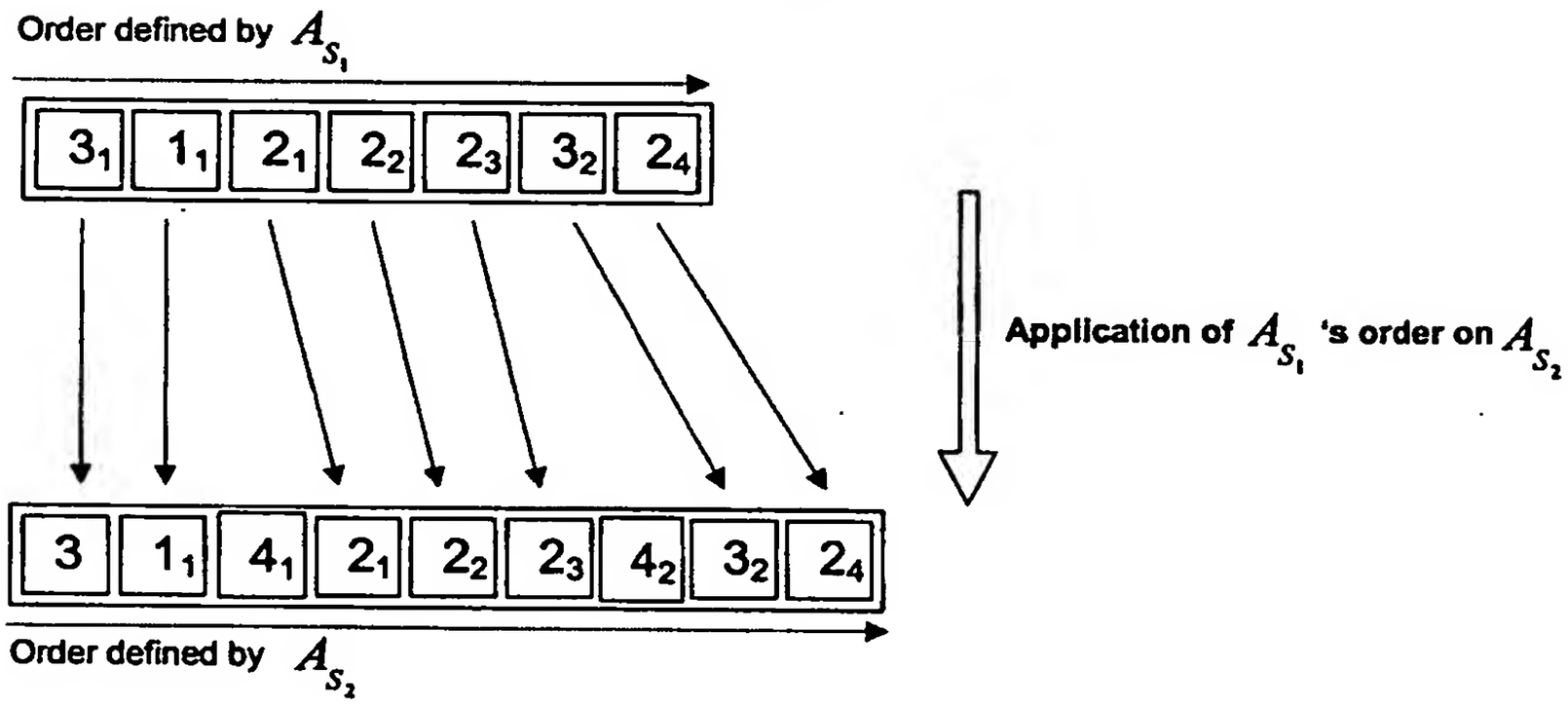


Fig. 5

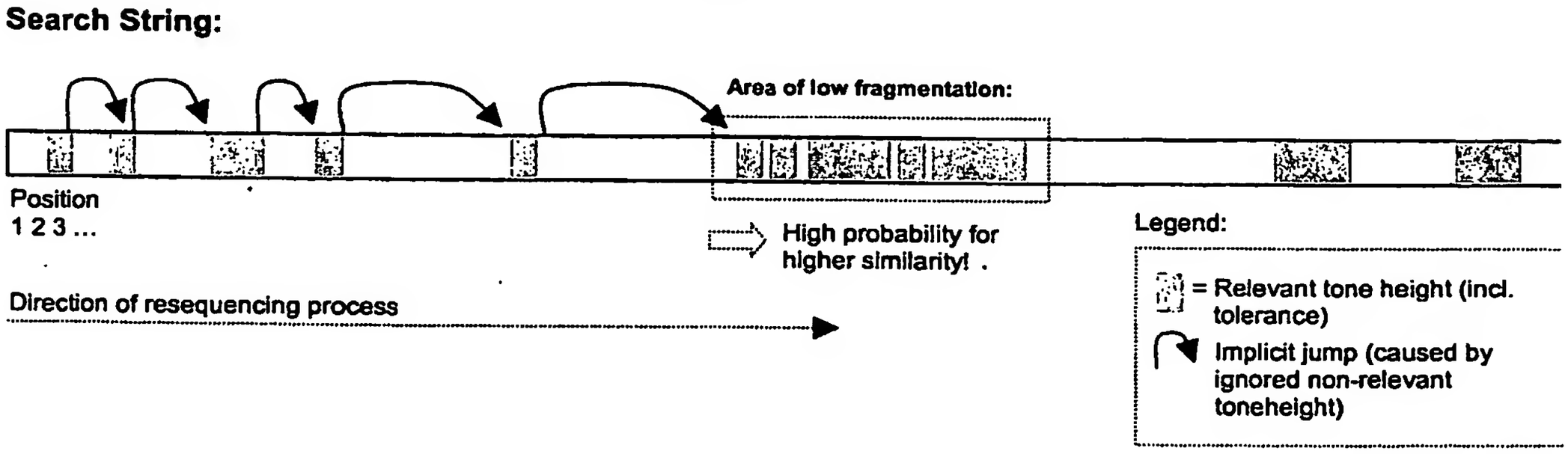


Fig. 6

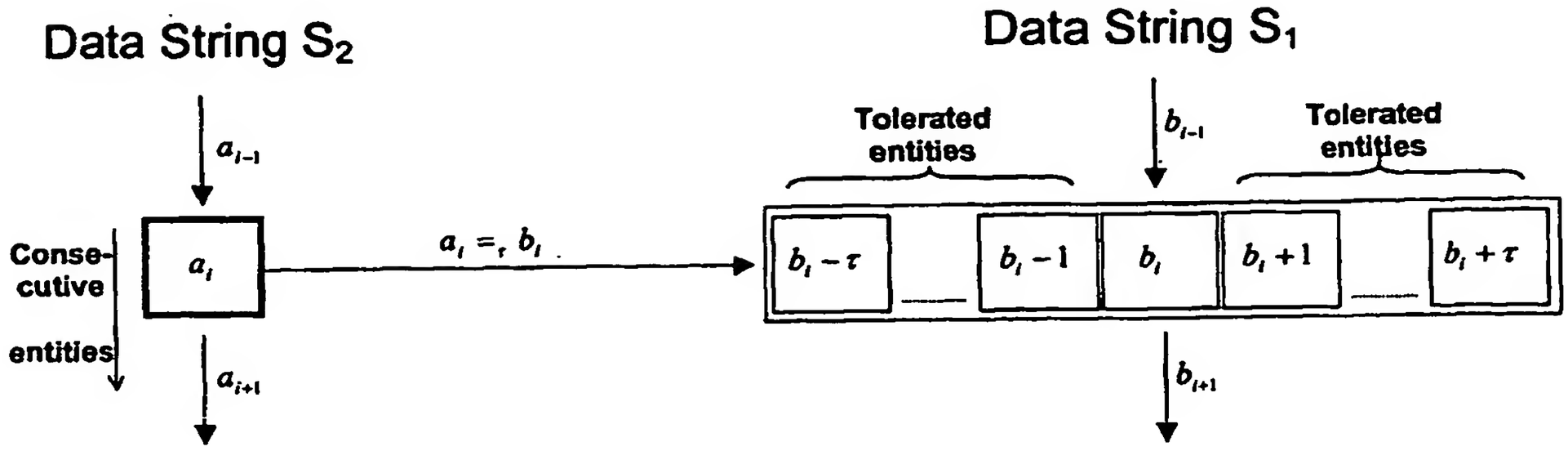

Data String S_2
Data String S_1
a_{i-1}
Conse-cutive entities
a_i
$a_i =_\tau b_l$
a_{i+1}
Tolerated entities
b_{l-1}
Tolerated entities
$b_l - \tau$
$b_l - 1$
b_l
$b_l + 1$
$b_l + \tau$
b_{l+1}

Fig. 7

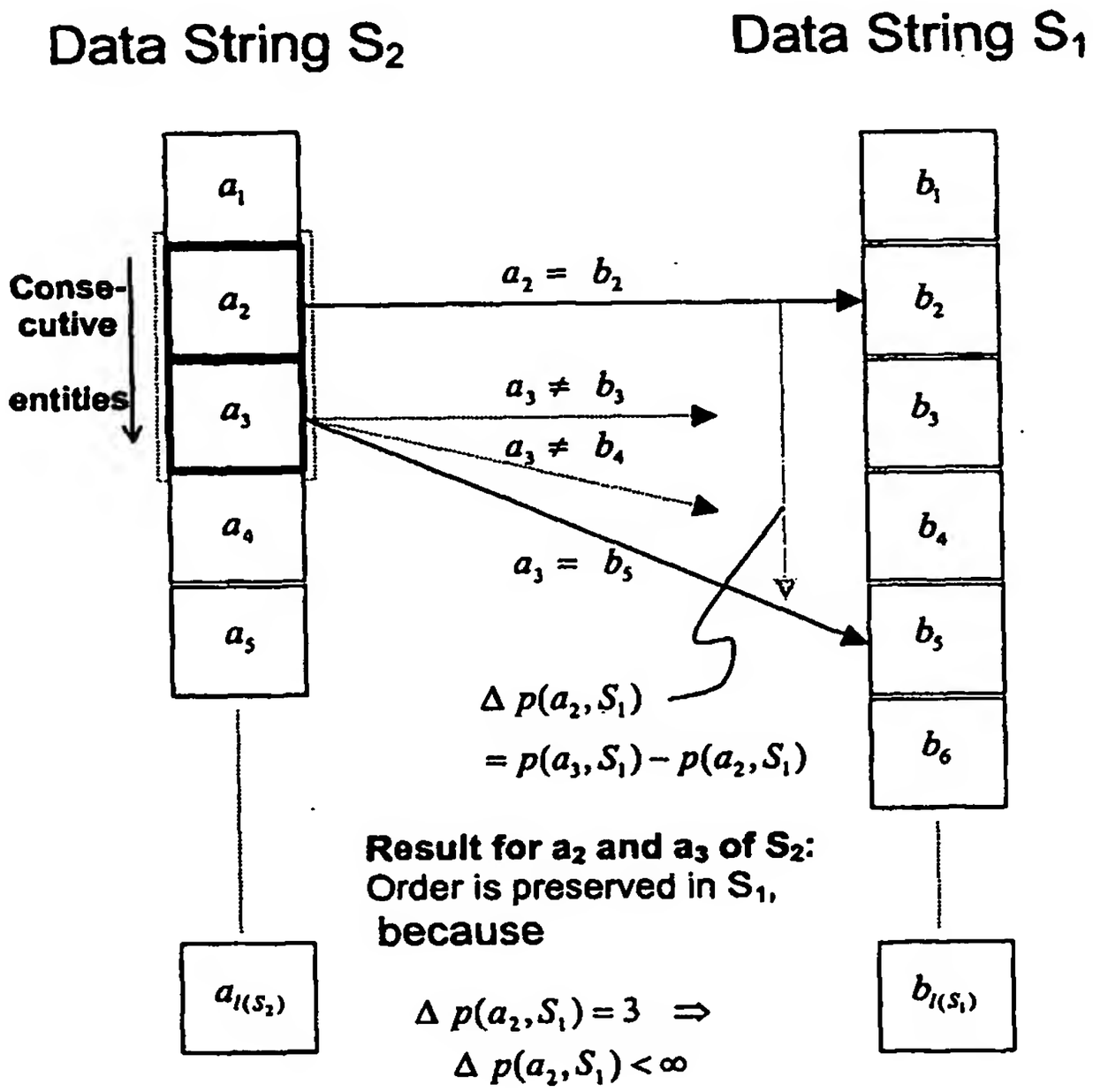

Data String S_2
Data String S_1
Conse-cutive entities
a_1
a_2
a_3
a_4
a_5
$a_2 = b_2$
$a_3 \neq b_3$
$a_3 \neq b_4$
$a_3 = b_5$
b_1
b_2
b_3
b_4
b_5
b_6
$\Delta\, p(a_2, S_1)$
$= p(a_3, S_1) - p(a_2, S_1)$
Result for a_2 and a_3 of S_2:
Order is preserved in S_1,
because
$\Delta\, p(a_2, S_1) = 3 \Rightarrow$
$\Delta\, p(a_2, S_1) < \infty$
$a_{l(S_2)}$
$b_{l(S_1)}$

Fig. 8

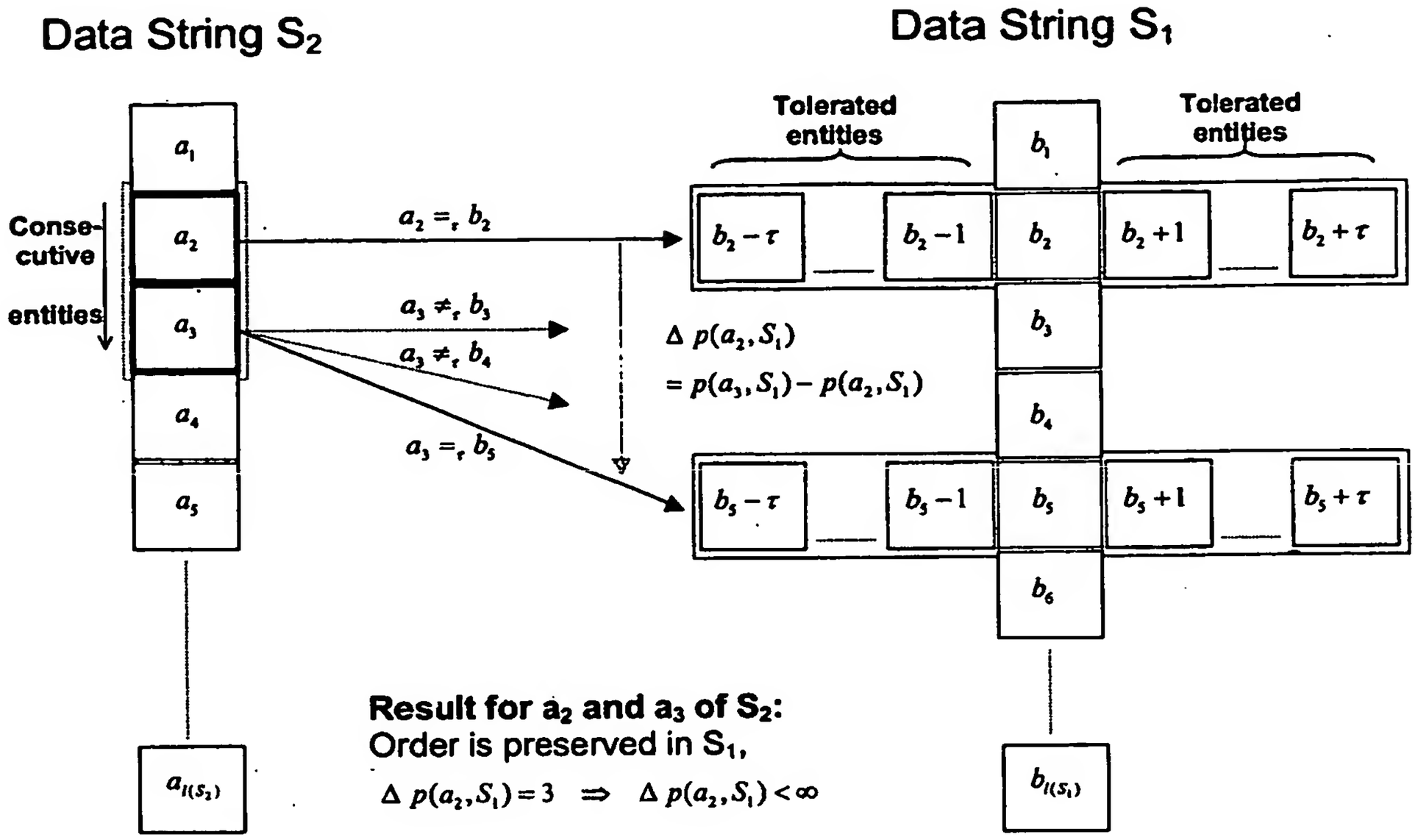

Data String S_2
Data String S_1
Tolerated entities
Tolerated entities
Consecutive entities
a_1
a_2
a_3
a_4
a_5
$a_{l(s_2)}$
$a_2 =_\tau b_2$
$a_3 \neq_\tau b_3$
$a_3 \neq_\tau b_4$
$a_3 =_\tau b_5$
$\Delta\, p(a_2, S_1)$
$= p(a_3, S_1) - p(a_2, S_1)$
b_1
$b_2 - \tau$
$b_2 - 1$
b_2
$b_2 + 1$
$b_2 + \tau$
b_3
b_4
$b_5 - \tau$
$b_5 - 1$
b_5
$b_5 + 1$
$b_5 + \tau$
b_6
$b_{l(s_1)}$
Result for a_2 and a_3 of S_2:
Order is preserved in S_1,
$\Delta\, p(a_2, S_1) = 3 \Rightarrow \Delta\, p(a_2, S_1) < \infty$

Fig. 9

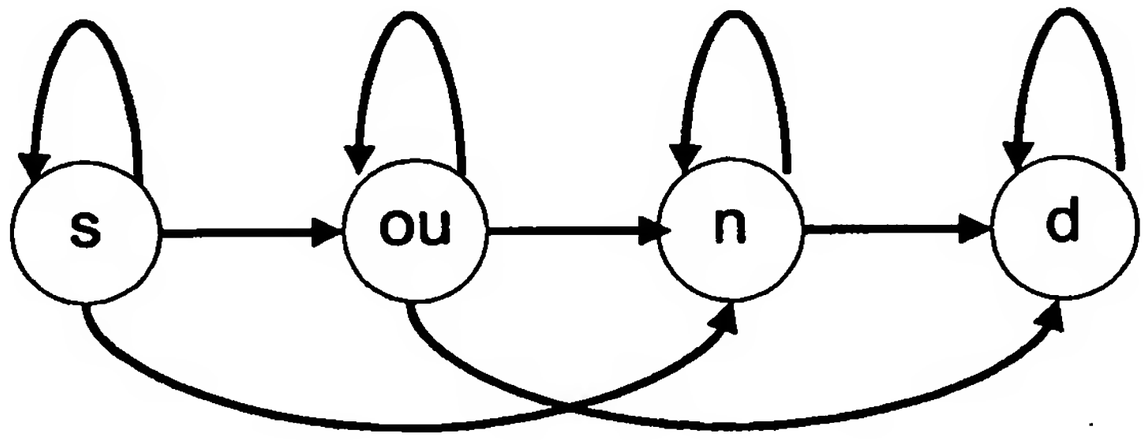

s
ou
n
d

Fig. 10